

Boston College Law School Digital Commons @ Boston College Law School

Boston College Law School Faculty Papers

3-30-2005

Scholarly Profit Margins and the Legal Scholarship Network: Reflections on the Web

Lawrence A. Cunningham

Boston College Law School, lacunningham@law.gwu.edu

Follow this and additional works at: <http://lawdigitalcommons.bc.edu/lspf>



Part of the [Legal Writing and Research Commons](#)

Recommended Citation

Lawrence A. Cunningham. "Scholarly Profit Margins and the Legal Scholarship Network: Reflections on the Web." *Indiana Law Journal* 81, (2005): 271-284.

This Article is brought to you for free and open access by Digital Commons @ Boston College Law School. It has been accepted for inclusion in Boston College Law School Faculty Papers by an authorized administrator of Digital Commons @ Boston College Law School. For more information, please contact nick.szydowski@bc.edu.

SCHOLARLY PROFIT MARGINS
AND THE LEGAL SCHOLARSHIP NETWORK:
REFLECTIONS ON THE WEB

*Lawrence A. Cunningham**

INTRODUCTION	3
I. ACADEMIC MEASURES.....	4
<i>A. Diverse Contributions</i>	4
<i>B. Scholarly Inquiry</i>	8
<i>C. Bibliometrics</i>	10
1. Partial-Productivity Studies	10
2. Selective Surveys	11
3. Selected-Citation Counts	12
4. Integrations	13
5. Left-Tails	14
II. ACADEMIC VISIBILITY.....	15
<i>A. LSN's Limitations</i>	16
<i>B. Instant Improvements</i>	17
1. Reputation Surveys	17
2. Publication Studies	18
3. Who Counts	18
<i>C. New Information</i>	19
1. Views	19
2. Downloads	19
3. Downloads ÷ Views.....	19
4. Citations ÷ Downloads.....	20
5. Control	20
<i>D. Transformative Potential</i>	21
1. Real Time.....	21
2. Tailoring.....	21
3. Motivator	21
4. Teaching.....	22
CONCLUSION	23

* Professor of Law & Business, Libby Scholar and Academic Dean (2005-07), Boston College Law School.
© 2005. Prepared, in part, to provide commentary at *Indiana Law Journal's* Symposium, *The Next Generation of Law School Rankings*, April 15, 2005, particularly on the paper presented there by Professors Bernard S. Black and Paul L. Caron.

SCHOLARLY PROFIT MARGINS
AND THE LEGAL SCHOLARSHIP NETWORK:
REFLECTIONS ON THE WEB

Lawrence A. Cunningham

Abstract

Controversy surrounding scholastic rankings arises, in part, because of complexities associated with measuring academic contributions. Legal researchers use various methodologies to assess scholarly production and impact but all suffer from inherent limitations and none provides data useful to scholarly self-reflection. The 10-year old Legal Scholarship Network (LSN) offers potential to improve considerably on both scores of public and personal assessment. This Essay critically evaluates approaches to conceptualizing scholarly profit margins, explores how LSN can enhance these conceptions, and opens new frontiers for this innovative Web-based repository of legal writing.

INTRODUCTION

Attempts to measure scholarly contributions necessarily have been narrowly conceived. They are research exercises using historical information selectively; count publications or citations selectively; and are limited to certain scholars. Traditional scholarly contribution studies value length, placement and certain types of inquiry. Implicit theories of measure hazard false distinctions between the overlapping attributes of quantity and quality and subjectivity and objectivity.

The Legal Scholarship Network (LSN) on-line repository of scholarly works potentially reorients such approaches, redefining the molds to promote appreciation of scholarship's ultimate value: disseminated knowledge. LSN provides real-time data comprehensively, potentially counts all works by all scholars, and implicitly incorporates survey data from the universe of scholars. Rather than tying measurement back to particular metrics scholars might then be tempted to maximize, LSN's capacious scoreboard reflects the essential reality of academic investment and return as entailing diverse means of intellectual contribution.

In addition to offering infinite scholarly content and a broad range of data, LSN offers cross-measurement capabilities that impose constraints against scoreboard fetishism. More powerfully, it de-dichotomizes the quantitative/qualitative and objective/subjective distinctions that afflict conventional inquiries. A key virtue of these effects is to offer individual reflections, creating personal mirrors useful as tailored motivators of performance. LSN paves the way for more vehicles like it, especially for teaching. LSN does not overcome all limitations of the quest to measure academic contributions, but promises considerable improvements.

This potential is important, compared to existing studies, since law schools and professors contribute to law as a whole and do so through scholarship, teaching and service. Relative emphasis on these three forms of academic investment varies by school and professor, as do academic returns on these investments. Measuring investment and return eludes reduction to sheer quantities, cannot be expressed by appeal solely to external assessment, and visibility of such references creates feedback effects that can obscure more meaningful measures of scholarly profit margins.

In business, profit margins and other measures are calculated in different ways for different purposes and what counts as successful varies with business and product type. A similar variability appears in academia, with no single measure being useful to assess contributions or results for all schools or all professors. Likewise, however, each school and professor is expected to contribute at least some investment, and produce some return, on each function, teaching, scholarship and service. Thus, for example, scholarly production is a professional *requirement*, not an optional tournament or narcissistic indulgence.

Despite several dozen legal academic studies probing what I call scholarly profit margins, the genre remains controversial. This is partly due to inherent limitations on

available data and to constraints of time and resources necessary to provide more complete pictures, forcing researchers to mine data selectively. LSN's Web-based repository contributes far more data in a more immediate format, making it useful not only to researchers seeking to refine such studies but, more importantly, to individuals interested in self-reflection. LSN's limits are clear, including self-selection bias and first-mover advantages, but its potential is large.¹

I. ACADEMIC MEASURES

Law contributes to the world through all society's functions, including its instruments of law led by global, federal, state and local legislators, judges, and regulators; lawyers of all kinds; and law professors of all types from a wide variety of schools. The only relevant trait that all these law-trained participants have in common is that they all went through the law schools. Thus law schools radiate immeasurable social contributions through all these people and the institutions they populate.

A. Diverse Contributions

In the United States, law schools contribute in different ways. A select handful of schools dominate the training of future law professors; a large group trains the leaders of respective state bars where they are located; some are more academically oriented while others are more professionally inclined.² A very few law schools seem able to do all of this, with enormous resources, making large and steady contributions to international, national, regional and state matters.³ Another half-dozen schools come close and some dozen others aspire to do so.

Beyond such a group of national elites are another 20 or 30 schools that contribute powerfully but place more emphasis on some things they do particularly well and less on other contributions satisfactorily made by others. Yet some 100 other schools concentrate on serving constituents not served by the foregoing groups. Resulting clustering among law schools is partly due to the country's vastness, its large number of influential legal markets and the many cross-sections of our complex law-based civilization. Ultimately, law school stratification attests to the centrifugal contributions of law schools to society.

One-size performance metrics do not fit all these schools because perspective matters. For example, peers can be defined using alternative metrics. From a school's viewpoint, metrics can be used to think about applications, admissions, training, pedagogy, placement, alumni relations, fundraising or faculty recruiting, advancement

¹ [Bernard S. Black & Paul L. Caron, *The Uses and Limits of the Legal Scholarship Network in Measuring Scholarly Impact*, 81 IND. L. J. ____ (2005)] [forthcoming]; see also Paul L. Caron & Rafael Gely, *What Law Schools Can Learn from Billy Beane and the Oakland Athletics*, 82 TEX. L. REV. 1483, 1539 (2004).

² See Thomas F. Bergin, *The Law Teacher: A Man Divided Against Himself*, 54 VA. L. REV. 637 (1968).

³ See J. M. Balkin & Sanford Levinson, *How to Win Cites and Influence People*, 71 CHI.-KENT L. REV. 843 (1996).

and retention. A measure's utility can vary across schools according to idiosyncratic factors, including: geography, size, subject area demand, institutional resources and ambitions, the percentage of faculty having graduated from the school or peers, relative number of alumni serving as partners in a relevant locale's judiciary or major law firms, and innumerable other factors.⁴

Appreciating these realities, one cannot automatically announce which law school is better, the nearby school with regional prestige or one with more national aspirations located a thousand miles away.⁵ Law school heterogeneity is probably an affirmative social value—aggregate law school contributions to society likely would diminish if law schools were monolithic.⁶ At the same time, all must contribute in certain uniform ways. They must train competent lawyers, generate legal knowledge, and address needs of the worlds they affect.

A similar account applies to professors within faculties. People contribute in different ways. All law professors are required to contribute something to the three traditional overlapping prongs of teaching, scholarship and service. These are required by virtue of the professorial job description; applicable AALS and ABA regulations;⁷ and school-level policy statements. While individual professors may contribute more or less along each of these lines, entirely neglecting any one of them breaches one's professional responsibility.⁸

The balance appears when recognizing that some schools offer lighter teaching loads to exceptionally productive scholars and assign heavier loads to those contributing to scholarship less than the norm. Another example is tenure standards that require excellence in scholarship but treat as sufficient competency in the other areas. It is possible to design a different system, creating separate positions for pure-scholars and pure-teachers,⁹ but the cross-over in tasks is so strong that such a model likely would be inefficient.

The same three requirements govern tenure-track faculty and clinical faculty, although the balance applied to the two groups may differ somewhat. Those hired using

⁴ See Jeffrey Stake, *The Ranking Game*, <http://monoborg.law.indiana.edu>.

⁵ See Thomas E. Brennan & Don LeDue, *Overview*, www.cooley.edu/rankings; see also Cass R. Sunstein, *Rethinking Law Schools: A Market Test?*, 81 IND. L.J. ____ (2005).

⁶ Cf. Scott Page & Lu Hong, *Problem Solving by Heterogeneous Agents*, 97 J. ECON. THEORY 123 (2001); James G. March, *Exploration and Exploitation in Organizational Learning*, 2 ORGANIZATION SCIENCE 71 (1991).

⁷ See American Bar Association, *Accreditation Standards for Law Schools*; American Association of Law Schools, *Accreditation Standards for Law Schools*.

⁸ See Roger C. Cramton, *Demystifying Legal Scholarship*, 75 GEO. L.J. 1, 5 (1986).

⁹ See Marin Roger Scordato, *The Dualist Model of Legal Teaching and Scholarship*, 40 AM. U. L. REV. 367 (1990).

12-month teaching contracts may lack time to devote to research; but those on 9-month contracts have entire summers. Either group may separately arrange to have allocable time during academic terms to conduct research and writing. No rule prevents clinical academic entrepreneurs from developing knowledge for public use. Indeed, a flagship law journal, *Clinical Law Review*, is devoted to providing a vehicle for such efforts.

These perspectives justify softening traditional angst investigating whether teaching and scholarship are complements or substitutes.¹⁰ With summers free from teaching, every legal academic should be able to identify a complex and unaddressed legal issue, articulate, dissect, evaluate and possibly resolve it. Even without summers free, teachers bearing a 6-credit term course-load have some time for scholarly endeavors, after accounting for service, preparation time and contact hours (novice teachers invariably require more time, commonly provided through lighter teaching loads).

How one meets these three overlapping requirements of teaching, scholarship and service also varies, according to both institutional needs and individual abilities. Schools define a range of teaching needs that must be met.¹¹ Scholarship can assume many forms and be disseminated using a variety of means.¹² Service ranges from participation in internal governance to meeting broader social needs.¹³

Measuring performance in these areas is complex, with utility of alternative tools varying across schools and individuals. Most elude measurement by strictly quantitative or purely objective criteria but such metrics may help. Thus contact hours do not measure teaching effectiveness but they are a good measure of teaching burden; relating these to teaching evaluations illuminates overall performance. Likewise, numbers of articles published may not measure contributive value, but they are a partial measure of productivity. Contrariwise, strictly qualitative and purely subjective assessments alone are unlikely to capture full contributory breadth—what is facile to one honest critic may be pithy to another.¹⁴

Multiple methods of evaluating contributions are thus likely to be useful while conceiving them as independent risks false dichotomizations. First, strong theoretical

¹⁰ E.g., James Lindgren & Allison Nagelberg, *Are Scholars Better Teachers?*, 73 CHI.-KENT L. REV. 823 (1998); Deborah Jones Merritt, *Research and Teaching on Law Faculties: An Empirical Exploration*, 73 CHI.-KENT L. REV. 765 (1998).

¹¹ See Clark Byse, *Fifty Years of Legal Education*, 71 IOWA L. REV. 1063, 103-69 (1986).

¹² See Robert H. Abrams, *Sing Muse: Legal Scholarship for New Law Teachers*, 37 J. LEGAL EDUC. 1, 2-3 (1987).

¹³ See EQUAL JUSTICE WORKS, CONSUMER GUIDE TO PUBLIC INTEREST AT LAW SCHOOLS (2004).

¹⁴ See Edward L. Rubin, *On Beyond Truth: A Theory for Evaluating Scholarship*, 80 CAL. L. REV. 889 (1992).

accounts support the view that measure is comprised of both quality and quantity.¹⁵ Even numbers bear both quantitative and qualitative attributes.¹⁶ Being “number one” sounds quantitative; but being first out of ten compared to first out of 100 evinces different qualitative relations and sheds no light on clustering. To earn \$2 per share denominates not only the numeric but also the ordinal and depends, in turn, on underlying standards of measurement and classification that are invariably comparative or qualitative.¹⁷ These realities apply to measuring nearly everything, from elephants to profits in a business.¹⁸ All require assessing factors simultaneously bearing quantitative and qualitative attributes.¹⁹

Second, classifications of objective and subjective are likewise suspect since they also overlap. Assessment is comprised of both objective and subjective evaluations.²⁰ The activity of objective measure partakes of subjective dimensions, while the activity of subjective assessment partakes of objective components. To appeal to an external source for input has an objective attribute, even if that external source offers what may be characterized as a subjective opinion; one’s own opinion, subjective in character, is embedded in a framework bearing objective realities.

In the case of law school or professor evaluation, therefore, all attributes matter, making it too simple to say that invoking certain data involves *adding* objective information to traditional subjective assessments.²¹ Characterizing efforts to invoke quantitative data to inform evaluation exercises should not be seen as abdicating qualitative evaluation responsibilities to “market” measures.²² It seems equally implausible to believe that combining objective with subjective criteria somehow delivers an optimally reliable assessment;²³ combining inputs may justify greater confidence in

¹⁵ See David Gray Carlson, *Hegel’s Theory of Measure*, 25 CARDOZO L. REV. 129 (2003).

¹⁶ See IAMBlichus, *THEOLOGY OF ARITHMETIC* (Robin Waterfield, trans., 1988); ROBERT TAVERNOR, *ON ALBERTI AND THE ART OF BUILDING* (1998), chs. 5-8.

¹⁷ See LAWRENCE A. CUNNINGHAM, *INTRODUCTORY ACCOUNTING, FINANCE AND AUDITING FOR LAWYERS* (4th ed. 2004), 222.

¹⁸ See John Godfrey Saxe, *The Blind Men and the Elephant*.

¹⁹ See Warren E. Buffett & Lawrence A. Cunningham, *The Essays of Warren Buffett: Lessons for Corporate America*, 19 CARDOZO L. REV. 5 (1997).

²⁰ See Jeanne Schroeder, *Subject: Object*, 47 MIAMI L. REV. 1 (1992).

²¹ Compare Caron & Gely, *supra* note 1, at 131.

²² Compare Richard S. Markovits, *The Professional Assessment of Legal Academics: On the Shift from Evaluator Judgment to Market Evaluations*, 48 J. LEGAL EDUC. 417 (1998).

²³ Compare Brian Leiter, *Measuring the Academic Distinction of Law Faculties*, 29 J. LEGAL STUD. 451 (2000).

one's overall assessment but this is not due to some uniquely definable blend of objective and subjective standards.

Failure to appreciate the range of contributions schools and professors make, and the overlap between both quantity and quality and objective and subjective, can lead to prescribing maximizing strategies that subordinate important functions. It may be tempting to overcome measurement complexities by sidestepping them as either futile or irrelevant, so long as one accepts that whatever measure is chosen by consensus likely will be maximized. One could then determine what should be maximized by relating it to public goods law schools or professors are uniquely qualified to produce, such as legal scholarship.²⁴ While rightly acknowledging the need to provide motivation for scholarly production,²⁵ this thesis overlooks that law professors are required both to produce scholarship and perform other functions.

B. Scholarly Inquiry

The purpose of scholarship is to generate and disseminate knowledge. Scholarship and the academic enterprise are characterized by inquiring and probing. The scholar is disinterested and unemotional. Credible results require the investigator to seek evidence contrary to one's hypotheses, in order to test their validity.²⁶ Critically, the scholar is also devoted to disseminating discovered knowledge for the sake of enriching the public store of learning. A researcher who does not share knowledge is not a scholar; teachers who do not publish are not scholars.

Legal scholarship shares these traits, but is afflicted by an occupational hazard of its generators. By training, they are advocates, and this role sometimes infects discourse in legal academic work.²⁷ Authors make assertions and try to defend them, using a range of argumentation styles and points of persuasion taught to them in courses and moot court exercises. This occasional feature of legal scholarship even appears in work of legal scholars also formally trained in purer academic disciplines demonstrated by possessing a Ph.D. Lacking traits of the academic tradition, however, such legal writing is polemics, rhetoric or satire, not scholarship.²⁸

²⁴ Russell Korobkin, *In Praise of Law School Rankings: Solutions to Coordination and Collective Action Problems*, 77 TEX. L. REV. 403 (1998).

²⁵ Legal scholars, collectively, produce approximately 1/7 of an article per year per capita. See William M. Landes & Richard A. Posner, *Heavily Cited Articles in Law*, 71 CHI.-KENT L. REV. 825 (1996) (estimating 250,000 works of legal scholarship produced in last quarter of 20th century); see also Howard Denemark, *How Valid is the Often-Repeated Accusation That There Are Too Many Articles and Too Many Law Reviews?*, 30 AKRON L. REV. 215 (1996).

²⁶ See JOHN STUART MILL, ON LIBERTY (1859).

²⁷ See Mark Tushnet, *Legal Scholarship: Its Causes and Cures*, 90 YALE L. J. 1205 (1981).

²⁸ See Peter Goodrich, *Satirical Legal Studies: From the Legists to the Lizard*, 103 MICH. L. REV. 397 (2004).

While there may be a place for advocacy in legal studies as distinct from other scholarly subjects, the hallmark of superior legal scholarship should remain a sense of discerning and conscious modesty.²⁹ This means articulating premises clearly and stating conclusions cautiously. Given legal training, above all, legal scholars may need to exert extra striving towards honesty to limit characteristics of opinion, bias and political proselytizing.³⁰

Several virtues may be claimed for scholarship, legal and otherwise. The first is intrinsic. The scholar researches and synthesizes out of a thirst for knowledge. Discoveries in this quest pay off directly to the discoverer. If private intrinsic value were the only virtue, there would be no need to publish results. But this approach would be unsatisfactory, not least because it would prevent researchers from gaining access to knowledge of others. Rather, the researcher must publish to qualify as a scholar—a contributor of knowledge. This creates public intrinsic value, enabling other scholars to expand knowledge cumulatively.

For legal scholarship, knowledge sharing has powerful instrumental functions for society. These include contributing to the rule of law and its social value. Examples are contributions that develop legal strategies (whether doctrinal, theoretical or methodological) that aid in resolving tensions on principled grounds. Judges make similar contributions in discharging their duties, directed towards resolving disputes. The interplay between judicial opinions and legal scholarship creates additional social value.³¹ It also presents interesting lines of inquiry for scholarship on scholarship and for citation analysis.³²

Personal instrumental values may motivate scholars as well. Law professors are required to write, as noted above, as part of their basic responsibilities—salary compensates them, in part, to write. Additional income accrues through summer research grants, annual raises above the norm, lateral opportunities attaching significant pay

²⁹ See Cramton, *supra* note 8, at 7-8.

³⁰ See Guido Calebrasi, *Letter to Paul D. Carrington, in "Of Law and the River" and of Nihilism and Academic Freedom*, 35 J. LEGAL EDUC. 1, 23 (1985).

³¹ See Harry T. Edwards, *The Growing Disjunction between Legal Education and the Legal Profession*, 91 MICH. L. REV. 34 (1992); Paul D. Reingold, *Harry Edwards' Nostalgia*, 91 MICH. L. REV. 1998 (1993); Paul Brest, *Plus Ça Change*, 91 MICH. L. REV. 1945 (1993); see also Robert C. Ellickson, *Trends in Legal Scholarship: A Statistical Study*, 29 J. LEGAL STUD. 517 (2000).

³² E.g., Chester A. Newland, *Legal Periodicals and the United States Supreme Court*, 7 KAN. L. REV. 477 (1959); Wes Daniels, *Far Beyond the Law Reports: Secondary Source Citations in United States Supreme Court Opinions: October Terms 1900, 1940, 1978*, 76 L. LIBR. J. 1 (1983); Louis J. Sirico, Jr. & Jeffrey B. Margulies, *The Citing of Law Reviews by the Supreme Court: An Empirical Study*, 34 UCLA L. REV. 131 (1986); Louis J. Sirico, Jr. & Beth A. Drew, *The Citing of Law Reviews by the United States Courts of Appeals: An Empirical Analysis*, 45 MIAMI L. REV. 1051 (1991); Louis J. Sirico, Jr., *The Citing of Law Reviews by the Supreme Court: 1971-1999*, 75 IND. L. J. 1009 (2000).

premiums, and advances or royalties from book publishing contracts. Scholars may also write to achieve leadership within the academy and their own schools. Scholarly prowess may strengthen one's position in establishing school policy, making appointments, selecting visitors, or hiring adjunct professors, and promote similar influence within professorial associations.

The intrinsic and instrumental often combine. Thus one may write and publish for scholarly influence measured by citations, which enhances the personal intrinsic value of research by providing a feedback function. This influence, in turn, can increase one's command of funding and internal school leadership. The combination can also contribute to establishing standards for the legal academic community or for a scholar's own school by demonstrating the aspired scholarly character for a current faculty, for tenure and promotion, and for appointments.

Scholarship is an investment. It is laborious and time-consuming. Performed for both intrinsic and instrumental purposes, it delivers some return. Most tangibly, salary profit margins can be important (and should reflect contributions), but related data are the province of deans and substantially hidden from public view. In contrast, measuring scholarly profit margins in academic terms is the purpose of the consciously-public field of bibliometrics.

C. Bibliometrics

Bibliometrics measures scholarly investment and return. In law, investment roughly focuses on output, productivity as measured by numbers of books, chapters, articles or pages published. Returns are measured, roughly, in terms of varying numbers of citations or other indicia of influence. It is rare for bibliometric studies in law to capture both parts of the equation simultaneously, instead concentrating on one (production) or the other (citations). Such analysis is both bemoaned and beloved, making its motivational role equivocal. Surveying its methods justifies this schizophrenia.

1. *Partial Productivity Studies* — Pioneering studies undertook to measure scholarly productivity by counting length of articles that were published in selected journals.³³ Subsequent studies followed the identical method, including back-to-back annual rankings of faculty scholarly output prepared by a group of law students.³⁴ Five

³³ See Olavi Maru, *Measuring the Impact of Legal Periodicals*, 1976 AM. B. FOUND. RES. J. 227; Ira Mark Ellman, *A Comparison of Law Faculty Production in Leading Law Reviews*, 33 J. LEGAL EDUC. 681 (1983); see also Richard A. Mann, *The Use of Legal Periodicals by Courts and Journals*, 26 JURIMETRICS J. 400 (1986); James Leonard, *Seen' the Cities: A Guided Tour of Citation Patterns in Recent American Law Review Articles*, 34 ST. LOUIS U. L. J. 181 (1990).

³⁴ *The Chicago-Kent Review of Faculty Scholarship Survey*, 65 CHI.-KENT L. REV. 65 (1989); Janet M. Gumm, *Chicago-Kent Law Review Faculty Scholarship Survey*, 66 CHI.-KENT L. REV. 509 (1990).

years later, a successor student group improved on the approach by enlarging the sources used to determine which selected journals to count.³⁵

Numerous weaknesses afflict such partial productivity studies. Article length is credited, which partially measures output but bears no necessary relation to quality or utility. Worse, only certain journals count. That is, the “most productive” scholars are reported based on the lengths of their articles in journals that are selected, in turn, based on how often the journals are cited. This attempts to incorporate a measure of quality into a measure of quantity, but it doesn’t quite work. First, the studies invariably limited results to 20 or so journals and simply ignored prodigious production published in hundreds of others (plus in books and other publications). Second, it counted for a person to publish numerous equal-caliber articles in journal-20 but did not count for another person to publish twice that number of equal-caliber articles in journal-21.³⁶

Unexamined as these studies evolved was the feature of defining concepts of “top-20” or “top-10.” The number of laws and law schools, professors, courses, and reviews expanded dramatically during the 20-year period from the pioneering studies to successors. Evidence of clustering crystallized. If cut-offs of 10 or 20 were sensible when there were 125 law schools and 250 journals, reconsideration was warranted when there were 175 law schools and 500 or more journals. Yet such fixation endures.

2. *Selective Surveys* — Academic reputation is estimated by polling academics. A leading example is that undertaken by a national news magazine as part of a larger effort to rank all universities, colleges, and professional schools nationwide.³⁷ It annually asks four academics at every law school to rank other faculties. Another survey developed selective data by getting 150 legal academics to size up their colleagues at other schools.³⁸

Some denominate this survey approach to assessing academic reputation as entailing “subjective” analysis.³⁹ This is sometimes done without defining the term or explaining how objective analysis differs and while overlooking how both attributes tend in varying ways to characterize virtually any assessment methodology. Partial productivity studies might be objective in a limited sense of being based on counting up data and arraying them in alternative formats. But they are likewise subjective in their methodological choices, the most striking of which is to gauge productivity according to

³⁵ Colleen M Cullen & S. Randall Kalberg, *Chicago-Kent Law Review Faculty Scholarship Survey*, 70 CHI.-KENT L. REV. 1445 (1995); *see also* James Lindgren & Daniel Seltzer, *The Most Prolific Law Professors and Faculties*, 71 CHI.-KENT L. REV. 781 (1996).

³⁶ *See* Caron & Gely, *supra* note 1, at 1533.

³⁷ *See US News & World Report, Graduate and Professional School Rankings*.

³⁸ *See* Brian Leiter, *Educational Quality Rankings of Law Schools*.

³⁹ *E.g.*, Leiter, *Academic Distinction*, *supra* note 23.

aggregate length of articles published in journals chosen based on frequency of citations to them.

Survey data, properly designed, can bear objective attributes. This is epitomized by surveys seeking expert opinion. Active legal academics are rightly presumed to have reliable knowledge. This reflects the concept of expertise upon which the surveys are predicated. Value should be enhanced if those surveyed exhibit traits of traditional academics, the core of which is honesty. Moreover, it would not be surprising if such academics invoke the same data points that putatively-objective bibliometrics relies upon: productivity measured by volume and impact measured by utility to other scholars (reflected in citations). Denominating one as subjective and another as objective likely retards rather than advances the inquiry. Still, such surveys are necessarily selective in scope and therefore limited in value.

3. *Selected-Citation Counts* — An example of the inextricable relation between quantity and quality appeared in the first modern citation study.⁴⁰ It examined all U.S. law journals then in existence (43) and considered how judges had used scholarly contributions. While repeatedly emphasizing that quantitative measures are either unreliable or infeasible, it nevertheless provided statistical data. Later citation studies put more confidence in numerical expression, treating tabulations as proxies for impact.⁴¹

Applying the citation approach to proxy impact, inquiry concentrated on counting citations to single articles.⁴² This could be of interest, especially to their authors and particularly as contrasted with their articles that are never or rarely cited.⁴³ But if one's purpose in bibliometrics is to assess influence, then a focus on single articles is too narrow. An author's *oeuvre* matters, not single pieces. Other limitations of this and predecessor studies (including the partial productivity studies) are: omitting interdisciplinary work and books and ignoring the effect of age on a work's influence.⁴⁴

Limitations of such citation studies—and of partial productivity studies—prompted research resembling what appointments committees do routinely: looking at how frequently individual scholars' names appear in fee-accessed scholarly

⁴⁰ Douglas B. Maggs, *Concerning the Extent to Which the Law Review Contributes to the Development of the Law*, 3 USC L. REV. 181 (1930).

⁴¹ See Scott Finet, *The Most Frequently Cited Law Reviews and Legal Periodicals*, 9 LEG. REF. SERVICES Q. 227 (1989); Mann, *supra* note 33.

⁴² See Fred R. Shapiro, [*The Most-Cited Law Reviews*], 71 CHI.-KENT L. REV. ____ (1996); see also Fred R. Shapiro, *The Most-Cited Articles from The Yale Law Journal*, 100 YALE L.J. 1449 (1991); Fred R. Shapiro, *The Most-Cited Law Articles*, 73 CAL. L. REV. 1540 (1985).

⁴³ See *infra* text accompanying notes 56-57.

⁴⁴ Landes & Posner, *Articles in Law*, *supra* note 25.

repositories.⁴⁵ To assess schools, the study summed up individual data by faculty. This approach eliminated the partial-productivity study focus on length and placement in selected journals. It also overcame other criticisms by allowing for counting citations to books, picking up some interdisciplinary citations, allowing for effects of age and focusing on authors (as well as schools) rather than pieces. The study displays the best of the scholarly method, seeking through repeated variations in the statistical model to test the robustness of its conclusions.⁴⁶

Despite considerable improvements, this work acknowledged the limits of stamina: in assessing overall faculty, it confined itself to 20 schools dubbed “leading” by national news media and added another “eclectically” chosen dozen. The study also ignored clinical faculty members and librarians, although excluding such faculty penalizes those who take seriously the idea that teaching and scholarship are core interrelated job descriptions.⁴⁷ Nor did this effort—or the others—reflect value accretion through preparation of teaching books, which are cited far less frequently than original works of scholarship.

4. *Integrations* — The welter of studies investigating scholarly profit margins, and their respective limitations, invites integrated approaches. One example involves reviewing all previous studies (of journals or faculties, for example) and taking averages.⁴⁸ This approach can be practical, as by aiding law libraries to determine how many copies of which journals to retain in print.⁴⁹ Although subjective attributes afflicting all such studies endure,⁵⁰ combinations of existing studies can be maximally objective or honest in the sense that an investigator injects no direct subjectivity or bias into the exercise.

Yet temptation can be strong when combining such approaches to recast earlier studies to suit tastes. For example, one study taking the combination approach redefined

⁴⁵ Theodore Eisenberg & Martin T. Wells, *Ranking and Explaining the Scholarly Impact of Law Schools*, 27 J. LEGAL STUD. 373 (1998) (using Westlaw).

⁴⁶ For example, after discerning data supporting the existence of a cluster composed of four schools, the authors conducted a series of exercises adding different schools to the mix and evaluating resulting effects. *Id.* The effects could have tended either to verify or to refute the cluster hypothesis.

⁴⁷ E.g., Daniel Kanstroom, *Deportation, Social Control, and Punishment: Some Thoughts about Why Hard Laws Make Bad Cases*, 113 HARV. L. REV. 1889 (2000); Paul R. Tremblay, *Toward a Community-Based Ethic for Legal Services Practice*, 37 UCLA L. REV. 1101 (1990).

⁴⁸ E.g., Finet, *supra* note 41.

⁴⁹ Kincaid C. Brown, *How Many Copies Are Enough? Using Citation Studies to Limit Journal Holdings*, 94 L. LIBR. J. 301 (2002); *see also* Marguerite Most, *Electronic Journals in the Academic Law Library: Law Reviews and Beyond*, 21 LEGAL REF. SERVICES Q. 189 (2002).

⁵⁰ *See* Arthur Austin, *The Reliability of Citation Counts in Judgments of Promotion, Tenure and Status*, 35 ARIZ. L. REV. 829 (1993).

parameters of predecessor studies, rather than simply taking them on their own terms.⁵¹ Consider the author's decisions of which publications to include in the partial productivity component. He uses the "top 10" student journals, the "top 10" faculty-edited journals, and a mix of university and law presses to pick books. Unlike a scientific study, the author makes selections and moves on, not attempting to see how changes in choices would affect results.⁵²

Illustrative is the 10 faculty-edited journals chosen, which the author picked based on consultations with unnamed "experts in the different fields."⁵³ Compare the author's choices with lists presented in six previous empirical studies:⁵⁴ four of the ten author choices did not appear on the list in any of the studies; three appeared on one list; one on two lists; and one on three lists. Only one appeared on all six lists. In contrast, the author omitted one journal that appeared on five of the six lists and another that appeared on four of the six lists. Subsequent studies confirm the point: the library copy-retention study mentioned above yielded seven faculty-edited journals warranting multiple copies, only one of which appeared on the author's list.⁵⁵

5. *Left Tails* — As a genre, studies of scholarly contributions overemphasize the right tails of distribution curves ("top" journals, articles, authors, schools). Whether this is due to manners, motivational aspirations, elitism or other forces, a unique study focused on the neglected left tails to investigate causes of citations, high and low.⁵⁶ It examined some 60 factors to gain insight into determinants of citations.⁵⁷ It also controlled for varying citation opportunity based on factors such as journal type. Findings include that article placement in elite journals does not guarantee any citation result. In fact, the study cites several articles published in so-called "top" journals that had never been cited a single time. This dimension of inquiry underscores the utility of the concept of scholarly profit margins—they can range from zero on up.

⁵¹ See Leiter, *Academic Distinction*, *supra* note 23, at ____.

⁵² Compare Eisenberg & Wells, *supra* note 45.

⁵³ Leiter, *Academic Distinction*, *supra* note 23, at ____.

⁵⁴ Authors of the compared studies are: Maru, Ellman and Mann (all cited *supra* note 33); Finet, *supra* note 41; Lindgren & Seltzer, *supra* note 35; and Shapiro, *Law Review Articles*, *supra* note 42.

⁵⁵ Compare Brown, *How Many Copies*, *supra* note 49 with Leiter, *Academic Distinction*, *supra* note 23.

⁵⁶ See Ian Ayres & Frederick E. Vars, *Determinants of Citations to Articles in Elite Law Reviews*, 29 J. LEGAL STUD. 427 (2000).

⁵⁷ See also Lawrence D. Brown, *The Importance of Circulating and Presenting Manuscripts: Evidence from the Accounting Literature*, 80 ACCT. REV. 55 (Jan. 2005).

II. ACADEMIC VISIBILITY

Legal academics are not alone in attempting to assess scholarly investment and return. Considerable research addresses this field of inquiry, including in finance⁵⁸ and accounting.⁵⁹ Scholars in these fields have begun to pay particular attention to the role of the Social Science Research Network (SSRN) in these undertakings.⁶⁰ While legal scholars have acknowledged this inquiry's potential,⁶¹ pioneering work has only just begun.⁶²

SSRN was established in 1994, with sub-networks on law as well as accounting, economics, and management (the law network is called Legal Scholarship Network, LSN). Law schools joined in waves, with the first group of 20 or so demonstrating serious commitments to scholarship. In succeeding years, the group grew to some 50 law schools, from the United States and abroad, with law professors from all law schools free to participate. LSN facilitates infinite dissemination of scholarship, reaching millions of people in nearly all the world's countries, and maintains affiliations with some 400 law journals. The data base thus configured is global, not limited to a national legal or social science index.

Authors post works without charge. LSN imposes no screening criteria—all works are permitted, including articles, essays, book chapters, and book introductions—and works may be submitted by anyone, including clinical and other professors, with or without institutional support. The resource is free for use to all people and most papers are downloadable for free or at low cost. Schools pay modest fees in exchange for periodic dissemination of school issues, delivered by e-mail to individual subscribers electing to receive that school's output (no fee is charged to subscribers). LSN also delivers free regular e-mail notices by subject matter to subscribers.

Papers are accompanied by an abstract that summarizes the work and interested users may opt to download a work in full. LSN displays author pages listing all

⁵⁸ E.g., Lee Pinkowitz, *Research Dissemination and Impact: Evidence from Web Site Downloads*, 57 J. FIN. 485 (2002).

⁵⁹ E.g., Lawrence D. Brown & J. C. Gardner, *Applying Citation Analysis to Evaluate the Research Contributions of Accounting Faculty and Doctoral Programs*, 50 ACCT. REV. 262 (1985); James R. Hasselback & Alan Reinstein, *A Proposal for Measuring Scholarly Productivity of Accounting Faculty*, 10 ISSUES IN ACCT. EDUC. 269 (1996).

⁶⁰ See, e.g., Lawrence D. Brown & Indrarini Laksmana, *Ranking Accounting Ph.D. Programs and Faculties Using Social Science Research Network Downloads*, 22 REV. QUANT. FIN. & ACCT. 249 (2004); Lawrence D. Brown, *Ranking Journals using Social Science Research Network Downloads*, 20 REV. QUANT. FIN. & ACCT. 291 (2003).

⁶¹ E.g., Eisenberg & Wells, *supra* note 45, at ____; Caron & Gely, *supra* note 1, at 1537; RICHARD A. POSNER, *PUBLIC INTELLECTUALS: A STUDY IN DECLINE* (2002), 168.

⁶² Black & Caron, *supra* note 1, at ____.

publications posted. It reports, by paper, the number of times abstracts are viewed and full papers downloaded. It also shows total downloads per paper, and provides a special designation for the 1000 SSRN-wide authors boasting greatest numbers of copies downloaded. The data are then disaggregated by field, with LSN presenting separate data for law schools and law professors in “tournaments” that enable users to order schools and authors according to variables of the user’s choosing.⁶³

A. LSN’s Limitations

Several characteristics limit LSN’s current utility for general bibliometric use, including chiefly a first mover advantage and self-selection bias. As a new dissemination vehicle, participation builds incrementally with time. Those joining earlier in the process enjoy longer exposure and more opportunities for usage, biasing view and download data towards first movers. As a voluntary supplementary system for dissemination, scholars are not bound to use the system, either for publication or research, creating a self-selection bias. These constraints may abate with time, as more scholars participate and as a growing data base leavens these effects. For now, they are serious.

Consider the 50 law professors most downloaded on LSN during a recent one-year period (the LSN-50).⁶⁴ The LSN-50 is overwhelmingly comprised of scholars specializing in business associations and securities regulation, with smaller but outsized presence of scholars in intellectual property and law and economics. This reflects more about usage than about contributions, however, because the number of works posted in various subjects on LSN is not skewed towards these subjects but towards constitutional law and other public law subjects.

The LSN-50 is dominated by males (only three females appear), which may simply echo its concentration among subjects which are, in turn, dominated by males.⁶⁵ In other ways, the LSN-50 is a varied lot, with senior, mid-level and junior faculty sprinkled throughout and including six scholars based at non-U.S. law schools. The LSN-50 is also surprisingly mixed among schools routinely appearing in studies as constituting elite national institutions and schools less favored in such standings or outside their scope (the mix is about 60-40).

Limitations appear when relating the LSN-50 to an overall citation count for all law professors conducted as of mid-2002 showing the most-cited 119 overall (the Most-Cited 119).⁶⁶ Notable is that the LSN-50 includes only six scholars among the Most-Cited

⁶³ Law schools: http://hq.ssrn.com/tournaments/Tournament_Display.cfm?TMY_gID=2
Law authors: http://hq.ssrn.com/tournaments/Tournament_Display.cfm?TRN_gID=2.

⁶⁴ *Id.*

⁶⁵ See Marjorie E. Kornhauser, *A Room of Their Own: An Empirical Study of Occupational Segregation by Gender Among Law Professors*, 73 UMKC L. REV. 293 (2005).

⁶⁶ Leiter, *Educational Quality Rankings*, *supra* note 38.

119. Even among LSN's best-represented subjects (business associations and securities regulation), the LSN-50 includes only two of the top-ten in those fields appearing on the Most-Cited 119 (others appear further down LSN's list with still-high numbers).

LSN highlights faculties boasting the 20 highest one-year downloads (the LSN-20). Three LSN-20 schools boasting a scholar among the LSN-50 do not boast any scholar on the top 50 of the Most-Cited 119 and four schools boasting scholars on that top 50 do not appear on the LSN-20 (and those scholars do not appear on the LSN-50). The data bases used for these observations are obviously incomparable, preventing statistical adjustments to determine how LSN-20 results would change by including the Most-Cited 119, but the observations show LSN's current limits for general bibliometric use.

As LSN attracts more contributors and users from more legal sub-disciplines, these divergences should abate. Even so, researchers attempting to employ LSN data in general bibliometric studies must attend to other limitations. When assessing faculty data, for example, researchers must appreciate that many schools retain on their sites the work of scholars whose employment terminates, whether by moving to other schools or otherwise. Such retention may be fair in the sense that the work was produced when a scholar was affiliated with a school, but school practices vary (LSN's tournament data are designed to correct for this, but must be checked). Depending on an inquirer's purpose, researchers must adjust for such factors.⁶⁷

With these observations in mind, these limitations do not defeat LSN's future efficacy for bibliometric purposes. More importantly, they have no bearing on other considerable benefits LSN provides relating to performance of individual scholars useful for informal self-reflection rather than as formal relative comparisons among scholars.

B. Instant Improvements

LSN provides three immediately valuable incremental improvements over existing methodologies. These seem valuable without regard to LSN's general future utility for bibliometrics.

1. *Reputation Surveys* — Estimating academic reputation by survey data may reflect perceptions other than those related specifically to scholarship. LSN embeds an implicit reputation survey tailored to scholarship specifically: the number of subscribers to e-mail issues released by particular schools. As far as I know, LSN keeps this information confidential, except that individual school data are provided to schools and a relative sense of standings can be gathered informally from LSN representatives. If this data were made publicly available, it would supply a "money-where-the-mouth-is" reputation count (figuratively, since it is free of charge but entails costs in time, in-box capacity and so on). To the extent such information is provided privately to schools, it

⁶⁷ Other examples are how to treat co-authored works, what weight to apply to article or book length, accounting for school size and how to treat scholars with appointments at more than one school.

still can be a useful tool when a school seeks to broaden the audience for its faculty's work.

2. *Publication Studies* — Measures based on publications in journals have been selective in choosing which journals to count. This may have been a practical necessity given the large number of journals but it is limited because there is only limited consensus as to the “top” journals. The limitation is exacerbated by growth in law and journals, including proliferation of specialized journals and concomitant designation of others as general interest (making which journal is “best” for a given work contestable).⁶⁸ Related studies sometimes ignored books or only included books published by selected publishers (also perhaps a practical necessity but there is virtually no consensus on the “top” book publishers). The studies have ignored book chapters.

On LSN, all an author's works can be collected in a single place, wherever and however published (or not otherwise published in print at all). Not only is this unique compared to traditional compilations of author *oeuvres* which are scattered, this also overcomes limitations of historical metrics based on publications: all publications count (whatever the journal, whomever the publisher), including book chapters. This has several other benefits.

First, it negates any biases associated with ranking journals. Second, it moots debate on the relative merits of student-edited law journals and peer reviewed journals—all count.⁶⁹ Third, it eliminates opportunity bias associated with placement in particular journals (with which citation studies must contend).⁷⁰ On LSN, the market filters scholarly quality rather than having this function performed by self-appointed cadres of referees (academics) or fortuitously assigned students (law reviews). Works struggle based on merit, avoiding any halo effect of “top” journals and any drag arising from “bottom” journals. LSN is a marketplace for ideas, not its mere metaphor.

3. *Who Counts* — Measures based on citations may provide robust indicia of influence, although it is hard to disentangle negative citations and effects of self-citations (minimized but not eliminated by the technique that counts numbers of works in which another work is cited).⁷¹ But some citation studies omit clinical and other professors. LSN includes any professor who wants to participate, including clinical and other professors. While LSN does not presently count citations, when combined with other

⁶⁸ See Tracey E. George & Chris Guthrie, *An Empirical Evaluation of Specialized Law Reviews*, 26 FLA. ST. U. L. REV. 813 (1999).

⁶⁹ Compare Roger C. Cramton, “The Most Remarkable Institution:” *The American Law Review*, 36 J. LEGAL EDUC. 1 (1986) with Philip M. Nichols, *A Student Defense of Student Edited Journals: In Response to Professor Roger Cramton*, 1987 DUKE L.J. 1122.

⁷⁰ See Ayres & Vars, *supra* note 56, at ____.

⁷¹ See Eisenberg & Wells, *supra* note 45, at ____.

new information that it produces, such studies may be improved by this characteristic of inclusiveness.

C. New Information

LSN provides new data concerning views and downloads. Each contains potentially useful information. When related to each other, and to citations, additional utility appears.

1. *Views* — LSN tracks the number of times an abstract is viewed. As the preliminary encounter with a work, this provides limited data as to the use of scholarship or its value. Abstracts may be read for numerous reasons and may be reached through conscious research efforts or more random processes. In the profit margin metaphor, views could be the equivalent of eyeballs hitting an Internet site, hyped in the tech boom of the late 1990s but ultimately worth far less than met the eye. On the other hand, algorithms that direct Web users to sought sites are impressive,⁷² reducing chance encounters with an LSN posting and giving the concept of views some purchase. Perhaps a better analogy, then, is to Nielson ratings, proxy measures used to establish advertising rates on television programs.

2. *Downloads* — Downloads are a secondary encounter with a work. A download does not mean another scholar learned from the work, but signals that potential. Downloads may be seen as a measure of impact but they should not be seen as equivalent to citations. At the most basic, while citations inform an author of how work is being used, downloads provide no indication of particular uses. They thus provide limited intrinsic value to authors that visible citation and commentary provide and no manifestation of contributions to expanding knowledge.

Another limitation of downloads as a metric is they risk undercounting usage, invisible though usage may be. For example, some readers of abstracts follow up directly with the author, usually by e-mail, seeking copies or, for printed works, go directly to the source. When authors send copies to such inquirers, an equivalent of a download occurs (it may actually be a stronger utility signal given the inquirer's additional effort made) but this is not counted as a download. Works are also obviously located by means other than LSN. Despite invisibility and potential undercounting, downloads offer additional information that, when combined with views and citations, are illuminating.

3. *Downloads ÷ Views* — Views can be combined with downloads to provide information. Researchers may decide based upon reading an abstract (counted as a view) that the related piece is or is not relevant to their inquiry and download it or not. Given Web algorithms that direct researchers to relevant abstracts (generating a view), the relation between downloads and views could proxy for the narrative quality of an

⁷² See Lawrence Page *et al.*, *The PageRank Citation Ranking: Bringing Order to the Web* (1998), <http://dbpubs.stanford.edu/pub/1999-66>; Sergey Brin & Lawrence Page, *The Anatomy of a Large-Scale Hypertextual Web Search Engine* (1998), <http://www.db.stanford.edu/~backrub/google.html>.

abstract—whether it *sells* a researcher on making a download. For personal purposes, the relation between views and downloads across a variety of pieces may thus provide useful feedback. Low ratios in a mix of comparatively higher ratios can provoke self-critical reflection upon how effectively one has summarized such work.

4. *Citations ÷ Downloads* — The relation of citations to downloads can be conceived as the ultimate profit margin. Invoking a business-model analogy: total publications posted represent aggregate investment; downloads are akin to sales; and citations, as the ultimate payoff, measure profit from those sales (hence, profit margin). The relation can be meaningful if the data base is sufficiently robust. Causation stories may be unruly, however. For example, papers garnering high downloads but low citations may suggest negative reception to the full paper or high downloading by those outside the discipline whose citations are being investigated (this is the interdisciplinary effect, noted above, necessitating calibrating a citation base's scope with the subjects of an LSN work or an LSN author's fields).

5. *Control* — Emphasizing anything draws attention, by definition.⁷³ Emphasizing views, downloads or citations can lead to maximizing strategies, including by manipulation. In the extreme, this can lead scholars away from honest inquiry and towards promoting parochial ends.⁷⁴ To continue the profit margin metaphor, risks of earnings management appear. A common affliction of citation studies, for example, concerns how they deal with self-citation.⁷⁵

For LSN, built-in manipulability constraints exist. First, LSN employs software capable of detecting inordinate downloads from single locations (defined by url) that could indicate manipulation, cautioning users against such efforts under penalty of expulsion from the network. Second, multiple measures can be designed so that, if manipulated, they produce disadvantages as well as advantages. A leading example is computing ratios of citations to downloads, which discourages self-downloading. Another is computing downloads per paper, which discourages posting a series of facile papers generating random attention to pad overall downloads and also discourages strategically motivated collaborations to boost total downloads. Third, computing network-wide averages and standard deviations for such ratios, and especially ratios of downloads to views, would provide grounds to detect anomalies requiring explanation.

Furthermore, concerns about controlling maximization through manipulation arise only when LSN data are used in formal relative assessments of scholarly contribution or impact. They do not matter for purposes of LSN's potentially more transformative potential for self-reflection.

⁷³ Korobkin, *supra* note 24.

⁷⁴ See Austin, *supra* note 50.

⁷⁵ E.g., Eisenberg & Wells, *supra* note 45, at ____.

D. Transformative Potential

LSN provides data likely to be useful in the future to researchers interested in measuring scholarly productivity and impact. A far greater utility appears, however, which might be called democratization. Scholars need not depend on historical studies conducted using selective tools by self-anointed arbiters of quality, quantity, impact or influence. On LSN, the data are all there, available for individual examination, updated daily for users to do with what they regard as most beneficial.⁷⁶

1. *Real Time* — LSN contributes the novelty of providing real time data. Previous studies require researchers to undertake a plan of evaluation, to collect data, to run tests, and to report results. LSN provides daily updated listings of views and downloads, by paper, author and school, at the click of a mouse. Tallies include totals as well as functions, such as downloads per paper, during the recent one-year period and from inception. This time-segmentation provides discrimination that helps to address assessment problems associated with a work's age and the first-mover advantage early participants enjoy.

2. *Tailoring* — LSN's data presentation facilitates tailoring of profit margin measurements for particular purposes. Individual faculty can conduct reflective personal assessments, dispensing with reference to studies that invariably depict the performance of only certain individuals. LSN thus facilitates moving from externally-oriented examination towards internal and personal examination. Such self-reflection is required by and may facilitate aspects of self-studies law schools conduct, of their own volition or as part of periodic accreditation reviews performed by the ABA. This flexibility can assist in conducting internal faculty assessments, whether by committees for promotion and tenure or by deans in establishing salary increments and awarding other benefits, and assist appointments committees.

3. *Motivator* — Tailoring may hold considerable motivational appeal. Evidence suggests that people tend to prefer subjective measures of their own performance because they generalize from their own experience and believe what they experience personally more than what they apprehend indirectly.⁷⁷ Some conclude from this that "objective information, even if somewhat flawed, is better than purely subjective information."⁷⁸ This observation implicitly notes how subjective and objective attributes can merge. On LSN, the fuzzy boundaries between objective and subjective can play a useful role.

⁷⁶ Less visible than LSN is the BEPress repository, which collects scholarship for dissemination using the Internet and also tabulates data on access but keeps that data for the confidential use of particular professors and schools. BEPress benefits may be akin to those of LSN in terms of self-reflection, although the public character of LSN's data magnifies these effects.

⁷⁷ See Caron & Gely, *supra* note 1, at 1529 (citing studies); see also Lawrence A. Cunningham, *Behavioral Finance and Investor Governance*, 59 WASH. & LEE L. REV. 767 (2002).

⁷⁸ Caron & Gely, *supra* note 1, at 1529.

LSN provides individual pages for participating scholars, containing a variety of information that may be arrayed along the fuzzy objective-subjective continuum. Towards the objective data end, individual LSN pages show number of works, views and download statistics; towards the subjective end, they show one's name and title, a link to a personal Web page (optional but common), and the titles of one's articles. Data clearly mixing objective-subjective attributes include a work's journal or press of publication and dates of publication and posting. All told, LSN author pages present a partial resume, a miniature academic biography, a *curriculum vitae* vanity mirror.

This mix of objective-oriented data and subjective-reflecting content appearing on LSN author pages likely feeds observed behavioral traits that elevate subjective reflections over objective reflections. Embedding the personal (more subjective) reflections within the frame of the more objective provokes honest self-reflection. LSN's blending of these images may thus reinforce academic norms commanding law professors to contribute knowledge through scholarly production, turning them into personal motivators.

While not definitive as scientific inquiry, innumerable personal experiences with colleagues interacting with LSN support these hunches.⁷⁹ Some colleagues have explained how their works bearing low download-to-view ratios compared to their others led them to reconsider the importance of crafting more compelling abstracts of their work. Others noted how observing their relatively low-download papers compared to high provides feedback as to reception among other scholars. Still others, more focused on comparative data, have responded to comparisons with colleagues or other schools by adding work to LSN or redoubling their commitment to scholarly pursuits.

Other anecdotal self-reflections colleagues have shared underscore the importance of emphasizing the reflective rather than competitive power of LSN, to promote achieving its more valuable functions as a way to disseminate knowledge. Given the first-mover advantage, subject-matter bias and interdisciplinary effects, if LSN is over-emphasized as a ranking metric, scholars not among early participants or in fields enjoying such advantages are discouraged from entering. Posting work more likely will

⁷⁹ I am the founding editor of LSN series at two schools, Cardozo and Boston College, and have served as editor of these for a cumulative total of five years. I have helped some 50 colleagues to post some 125 works using these vehicles. Countless conversations and extensive feedback have resulted, from which the examples in the text are drawn. LSN editors likely approach their roles differently. My approach includes the following components: (1) memoranda introducing faculty to the concept; (2) regular periodic reports (approximately quarterly) on: works recently posted, works to be posted in the next release and school data on cumulative total papers and downloads; (3) regular periodic reports (approximately annually) on LSN tournament data, with links by faculty name/url to their LSN pages; (4) occasional tips to faculty, such as providing links to LSN author pages in email signatures and sending email alerts to small groups of persons likely to be interested in a recent posting; and (5) assuring that target constituencies know that free subscriptions are available to the school's LSN. At BC, Deena Frazier and other librarians play a central role in administering LSN and we work closely to promote effectiveness. Overall, the plan is to excite the community's scholarly enthusiasm. It succeeds. Unanimous faculty approval or support sometimes occurs for a wide range of issues facing a school, but the unanimous enthusiasm for LSN that I have observed has no parallel that I have experienced in thirteen years of teaching.

position them low on a list whereas not posting work enables attributing any such placement (or omission) to limited participation (or non-participation).

4. *Teaching* — Tailoring capacity points to potentially broader applications of LSN's model. LSN focuses on scholarship, both investment and return. Routinely neglected in research on scholarly profit margins is a critical point: what do students think? Put differently, how can the teaching function of the professorial job description be given equal prominence to that given to scholarship in traditional studies and underlined on LSN? After all, do students really only want to go through law school to get them a certain job,⁸⁰ or are they interested in knowledge, learning? Even those eager to practice invariably possess intellectual curiosity. Can LSN-inspired vehicles be put to use for the teaching function?

Substantively, content on a Legal Teaching Network (LTN) could include lecture notes and PowerPoint slides, many of which already appear on scattered sites throughout the Internet.⁸¹ Reflectively, course evaluations, long available in print form in libraries and posted on some internal school Web sites, could be posted. LTN could include additional such details as how frequently professors teach which courses (potentially of special utility for prospective students eager to study under a famous professor, who might otherwise be disappointed to learn that the professor does not teach very much). Likewise, information concerning the number and type of independent study projects particular professors supervise would be useful, and whether any of these are eventually published in print and/or on LSN.

For professors, contact hours would be useful information to collect and display on LTN, showing teaching burden. Connecting the link between certain kinds of scholarship and pedagogy, consider authors or editors of teaching books. Contributions to knowledge and teaching from these products are not measured well by length, number, publisher or citation counts. A better way to measure value contributed by teaching books is adoptions—the number of schools or professors teaching from the book. Such data could be posted on LTN. For schools, aggregate data concerning student-to-faculty ratios and total student body size could usefully be displayed on LTN.

CONCLUSION

Extolling LSN's virtues must be accompanied by warnings about scoreboard risk: the danger of fixation on the scoreboard rather than the playing field.⁸² A cautionary note concerning transparency is thus in order. The information era is accompanied by devotion to transparency, at least rhetorically. Citizens and policy devotees advocate openness across a wide range of institutions, including government, military, diplomatic corps,

⁸⁰ Korobkin, *supra* note 24.

⁸¹ Business professors routinely post on SSRN case studies designed for classroom use.

⁸² Compare Ayres & Vars, *supra* note 56, at ____ (warning that data might tempt scholars to fashion work according to discoveries about citation-attribute correlations but this is "fraught with peril").

press, corporations, and others. While a certain degree of transparency, and information dissemination, is undoubtedly desirable, pure transparency may have considerable negative side effects.

For example, the Freedom of Information Act exposes governmental records to public scrutiny, but exceptions and limitations apply to protect national security and other sensitive interests.⁸³ As another example, public corporations must periodically prepare and disclose financial reports containing extensive information about business performance, but opening these files to naked public inspection poses considerable risks to operational and strategic success.⁸⁴

For the legal academy, while scholarly profit margins are paid in actual currency, dean notes concerning salary levels and raises are likely best kept confidential rather than opened for faculty or public scrutiny, in the interest of personal privacy, faculty collegiality and institutional direction. In what category do scholarly presence, teaching evaluations and contact hours belong? Intelligently designed and appreciated, related data can be useful to professors and schools for self-reflection and to constituents to facilitate superior matching.⁸⁵

Traditional academic contribution studies in law selectively measure both productivity (pages in selected journals) and impact (citations on Westlaw to certain faculty at a few dozen schools) or use surveys of a few hundred persons. Controversial as all this is, LSN expands the picture considerably, to invite inclusion of all production, by all professors, and by anyone wishing to use the network. While offering resources to improve traditional bibliometric exercises, LSN also provides a unique capacity to promote self-reflection and has the potential to map a platform to provide equivalent prominence to teaching.

⁸³ See Mary-Rose Papandrea, *Under Attack: The Public's Right to Know and the War on Terror*, 25 B.C. THIRD WORLD L.J. 35 (2005).

⁸⁴ Compare Peter K.M. Chan, *Breaking the Market's Dependence on Independence: An Alternative to the 'Independent' Outside Auditor*, 9 FORDHAM J. CORP. & FIN. L. 347 (2004).

⁸⁵ See Stephen R. Heifetz, *Efficient Matching: Reforming the Market for Law Review Articles*, 5 GEO. MASON L. REV. 629 (1997).